# Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

expressing $b^2$ in terms of the parts into which you have cut it; another equation for $a^2$ and another for $c^2$. Add the values of $a^2$ and $b^2$, member to member, and compare the sum with the value of $c^2$. What principle can you discover for the sides of this triangle? Compare this principle with the result of the last exercise. Perform this experiment with more than one right triangle. Does the principle hold for triangles not right angled?

This is one of the most important principles of geometry and should be thoroughly understood.

82. Draw very accurately a number of right angled triangles, measure their sides and test the principle of Ex. 81.

Definition: The side opposite the right angle in a right angled triangle is called the *hypothenuse.*

It is known that the early Egyptians paved the floors of some of their buildings with isosceles right triangles. From this it has been suggested that the Egyptians knew this proposition for this special triangle. What do you think of the suggestion?

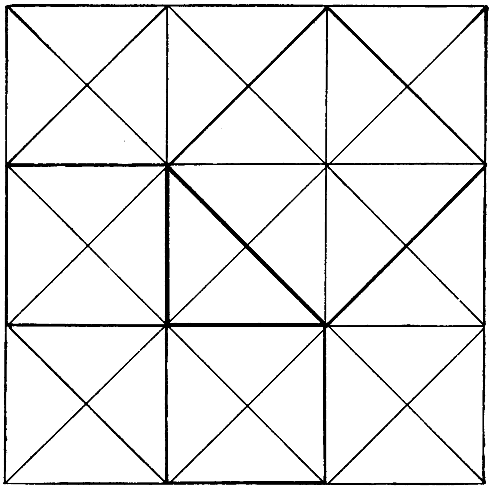


FIG. 52

# The High School

**Latin, Eighth and Ninth Grades:** (ALLEN W. GOULD.) Lessons XII, XIII, and XIV, printed in the January COURSE OF STUDY, are simplified from Livy. The twelfth tells how the Roman matrons met by themselves and voted to give their ornaments to the treasury to pay a vow that had been made to Apollo. This story adds one more detail to the growing picture of the Roman matron. The pupils have seen her spinning and weaving the clothing of the family, and keeping her house with dignity and honor, as well as watching the omens and advising and encouraging her husband to do great deeds. Now the Roman matrons are seen to assemble by themselves and discuss the serious public matter of an unpaid debt to Apollo, and finally resolve that the debt shall be paid, and furnish the means for paying it.

The family life that made this high position of woman possible will seem perfectly natural to the students, because it is so much like our own modern home, and it may be necessary for them to see the position of the wife in Athens or in Asia at that time in order that they may appreciate the difference between the woman of the East and the woman of the West.

The maternal family as found among the American Indians, where the mother has to think and act almost wholly for herself and her children, can be described and contrasted with the Oriental family, where the wife is a cipher, and with the Roman and Anglo-Saxon family, where both husband and wife think and act. The pupils may then be asked which of these family types is the most helpful in making this world better. They may also be asked what danger there would be in the Roman family if both husband and wife thought for themselves. Would they be apt to think differently, and so divide the home?

How far would this danger be avoided by the law giving the husband supreme authority? The students can then be asked to watch the Roman family, as they see more of it, and find out whether it went to pieces.

This lesson also makes another addition to the pupils' ideas regarding Roman roads and carriages. The extreme rarity of wheeled vehicles in the city and the character of the streets will help to make the picture of Roman life more distinct, while the trip of Horace (Sat. I, 5) to Brundisium can be told briefly and so give distinctness to their idea of Roman traveling. They should make a map of southern Italy, putting in all the towns they know and connecting Rome with Capua, Beneventum, Brundisium and Tarentum by the Appian Way. They can measure the distances and calculate how long it would probably take Horace to make the journey, and their results can be compared with the actual time. The incidents of bad water, gritty bread, and smoky fire will help the students to realize the discomforts the Romans had to suffer as they traveled over the world to establish law and order.

In studying the construction of the Roman roads it may be well to begin by asking the class what they know about modern roads. The two or three individuals who seem most interested may be asked to report to the class what the best modern roads are and how they are built. Two other students may be asked to find out what they can about Appius Claudius Cæcus, the first road-builder. The rest of the class can be required to report on different parts of the ancient roads as found described in the references to the lesson. Throughout the whole study the function of the roads in bringing mankind together should never be lost sight of.

It might be well to have the pupils find out whether the United States, measured by days' journeys on the railroad, was larger or smaller than Italy, measured by days' journeys on foot or on horseback.

Lesson XIII gives the story of Horatius at the bridge, and so adds another important detail to the idea of the roads. Even the wooden bridges removed the barriers which the rivers offered to the coming and going of merchants and magistrates, but when the Romans found out how to use the arch, and threw the massive causeways of stone over the mighty streams, they helped the world to take one of its greatest steps toward the fellowship of all mankind.

The typical Roman is seen in Horatius, brave but prudent, pious but self-reliant. Some of the students will be asked to read the fuller account in Macaulay's well-known lay, while others report on the material found in the references given in the January COURSE OF STUDY and in Smith's *Dictionary of Biography* under Cocles.

Lesson XIV gives the story of Tarpeia's treachery, and reinforces the stern ideal of the Roman maiden, which the students have already seen in Virginia. It also shows another use to which the Romans put the arch in bringing streams of water into the heart of the city. This was a great step in the evolution of the city. Under the empire Roman law and Roman aqueducts enabled men to live together in health and harmony. Some of the students can report on the water systems of New York and Chicago, while others report on the material found in the references. The picture of the Greek girls gives a vivid idea of the way the water was carried before it was distributed among the houses and the way it was procured for some houses even in Rome, as the line from Plautus shows.

The story of the siege of the citadel will afford a good opportunity to tell the students the primitive condition of the settlements on the seven hills as shown by recent excavations. Starting with this primitive picture, the history of the growth of the Roman state can be read in extracts from the *Vivi Romæ*, which it is expected the students will be able to read by the time they have finished these fourteen lessons.

At the Christmas festival one of the characters represented was Julius Cæsar in tunic and toga. These garments were made of wool, as nearly as possible like the Roman originals, the toga being an ellipse fifteen feet long by ten feet wide, the shape approved by Marquardt in his *Privatleben der Römer*. The Latin classes of the Ninth and Tenth Grades were present at the draping of the toga, so that they could realize what the wearing of the toga meant and understand why the Romans were so glad to escape it. There was no difficulty in reproducing the folds shown on statues not later than Cæsar's time.

## Ninth and Tenth Grades

**Latin:** This class will continue the study of the influence of Rome upon modern Europe by reading Cæsar's *Gallic War*, I, 6-14. The students will investigate the composition of the Roman army and the form and meaning of the camp by using the reference already given in the COURSE OF STUDY for October (p. 177). The references will be distributed among the different members of the class, and some of the pupils may be asked to make wooden models of such parts of the Roman and Gallic armor as can be easily reproduced in the Manual Training room, so that they may be familiar with its size and weight, and realize how far it differed from our weapons of to-day. The students will also make maps of the country, to give them more definite ideas of the physical form of what is to be the scene of all European history.

**Greek:** The beginners in Greek will continue reading the conversations of Socrates simplified from Xenophon to get at Athenian thought, and the history of the Persian War in Moss' *First Greek Book* to learn the historic background; while the lessons in Atherton's *First Greek Book* will be kept up, to help in mastering the forms as described in the January COURSE OF STUDY (p. 475). The exact amount of ground we shall cover we cannot tell until we find how readily the different students assimilate the different ideas. In connection with this reading we shall take up the ritual and mythology of Greece as far as seems necessary to fill out the picture in the mind of the student.

**German:** (DR. SIEGFRIED BENIGNUS.) As these pupils are studying Greek history during this quarter, the work will therefore be the study of Athens under the administration of Pericles, illustrating the most prosperous time of Athens in political power, commerce, art, and literature, and the beginning of the Peloponnesian War. Only easy words and simple constructions with phrases will be used, so as to include suitable exercises in declension and conjugation of irregular verbs. The results of this historical study will be summarized by the pupils both verbally and in writing. In reading, Andersen's *Picture-Book Without Pictures* will be continued. The substance of the short stories after careful reading will be reproduced verbally by the pupils. As another means of strengthening oral expression, exercises in the language of everyday life will be conducted by having one pupil ask familiar questions, and another give the correct answer. The various German songs taught by the teacher of music have proved a welcome adjunct to the public performances of the school, such as Christmas and morning exercises They have also proved an effective means of correcting the defective pronunciation, especially of vowels. In February, Heinrich Heine's *Loreley* will be sung to the familiar melody of Friedrich Silcher. For memorizing, another poem of Heine's has been selected:

> Du biſt wie eine Blume
> So hold, ſo ſchön und rein.
> Ich ſchau' dich an, und Wehmut
> Schleicht mir ins Herz hinein.
>
> Mir iſt, als ob ich die Hände
> Aufs Haupt dir legen ſollt',
> Betend, daß Gott dich erhalte
> So rein, ſo ſchön und hold.
>
> Heinrich Heine,
> „Buch der Lieder".

**Physiography:** (WALLACE W. ATWOOD.) Ninth Grade — Shore Lines:

I. Observational work through study of maps, models, and pictures of the coasts of the Mediterranean Sea and other regions.

II. Classification of coast lines. Compare west coast of Italy, the Italian "foot," and coasts of Greece with northwest France, Belgium, and Holland.

III. Activities along shore lines.

1. Erosion, developing cliffs, caves, and terraces.

2. Transportation by waves, undertow, and littoral currents.

3. Deposition, developing terraces, beach ridges, barriers, bars, spits, hooks, loops, deltas, and dunes.

IV. Effects of depression. Study examples about Greece, west coast of Italy, Stockholm district, west Coasts of Scotland, and Norway, southern Sweden, Maine, and Puget Sound.

V. Effects of elevation. Study examples in Holland, Belgium, northwest France, Atlantic coastal plain of the United States, Texas, Mexico, Argentine Republic.

VI. Recognition of ancient shore lines by (1) cliffs, (2) terraces, (3) beach ridges, (4) deltas, (5) ramparts or bowlder walls, (6) fossils, (7) local water-worn gravels, (8) consistent horizontality of above features. Study examples about Chicago, Great Salt Lake, Utah, Lake Chelan, Washington.

VII. Settlement and development of civilizations along different coasts. Compare life of Greece with that of Egypt, of Phœnicia, of Holland, of the Atlantic coastal plains of the United States.

**Art Expression:** 1. Modeling in sand the Mediterranean region.

2. Modeling in chalk special coastal regions of Egypt, Greece, and Italy.

3. Painting with water-colors scenes typical of the Mediterranean region.

**References:** Davis, *Physical Geography;* Gulliver, *Shoreline Topography;* Geikie, *Elementary Lessons in Physical Geography;* Mill, *Realm of Nature.*

**Mathematics:** (GEORGE W. MYERS.) Geometry. These grades will continue their studies of type forms used in architectural construction. The geometrical forms used in Greek architecture will be given special attention, though the work will not be confined exclusively to such forms. The necessary facility in the use of drawing instruments and in the principles of geometrical construction will be secured through the drawing to scale of simple mosaic patterns, Greek frets, frescoes, and windows, and in designing other ornamental parts of buildings, using both assigned and original fundamental figures. The special topics of study will be:

1. Greek arches. a. The segmental arch (Fig. 37). b. Pointed horseshoe arch (Fig. 43). c. The equilateral arch (Fig. 44).
2. Gothic arch (Fig. 52).
3. Roman arch (Fig. 41).
4. Greek frets and borders (Figs. 18 and 19).
5. Panel doors (Fig. 42).
6. Ornamental patterns (Figs. 47, 48, 49, 51, 56, 57 and 58).
7. Frescoes, mosaics, and mosaic borders (Figs. 21 to 36, 38 to 40, 45 and 54).
8. Designs from assigned fundamental forms (Figs. 1 to 12, excepting 2).
9. Ornamental windows (Figs. 13, 14, 15, 45, 46 and 52).
10. Original geometrical designs.

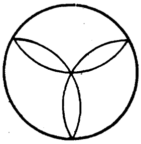
Some time will be spent during the succeeding months in the manual training shop in the construction of simple astronomical apparatus, such as the sun-dial, gnomon, quadrants, etc.

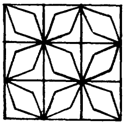
## Eleventh and Twelfth Grades

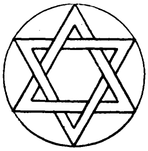
**General Geology:** (WALLACE W. ATWOOD.) Eleventh Grade.

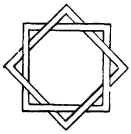
XIII. Alleghany Plateaus.

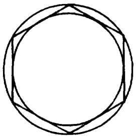
1. Location and physiographic boundary.
2. Topography. Its erosion history.

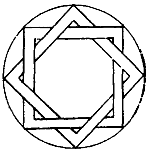

1

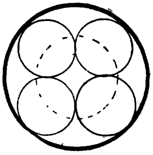

2

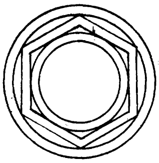

3

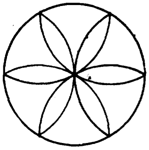

4

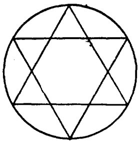

5

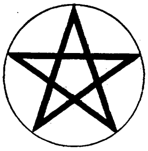

6

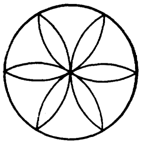

7

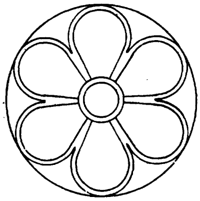

8

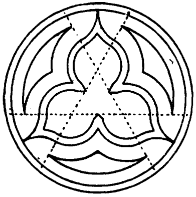

9

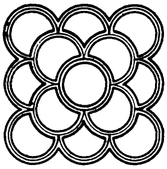

10

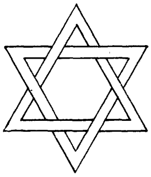

11

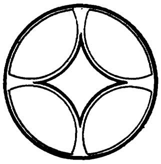

12

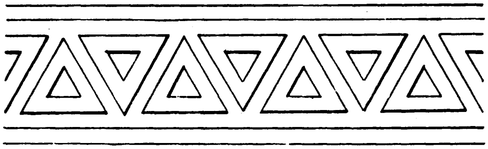

13

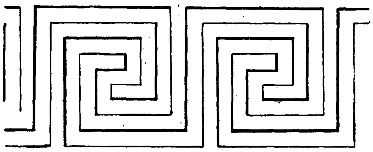

14

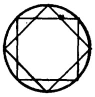

15

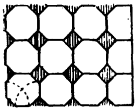

16

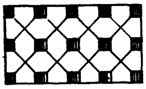

17

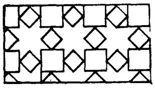

18

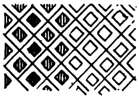

19

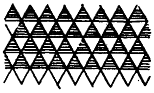

20

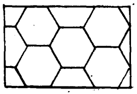

21

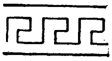

22

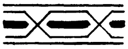

23

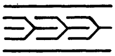

24

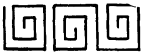

25

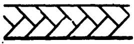

26

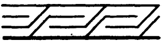

27

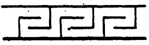

28

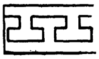

29

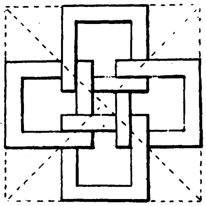

30

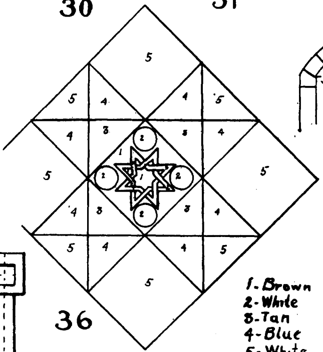

31


32

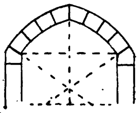

33

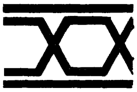

34

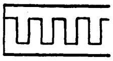

35

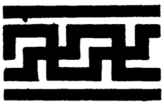

36

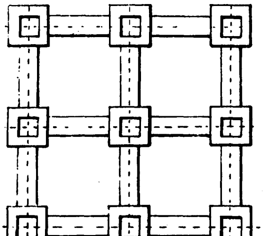
1-Brown
2-White
3-Tan
4-Blue
5-White

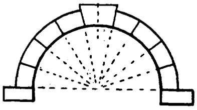

37

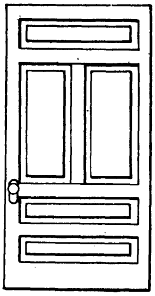

38

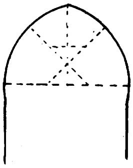

39

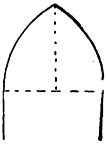

45

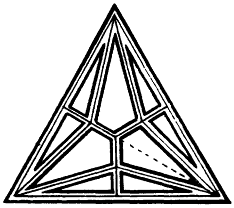

40


41

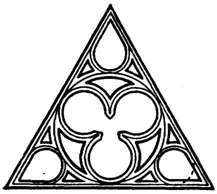

42


43

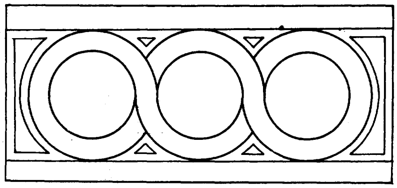

44



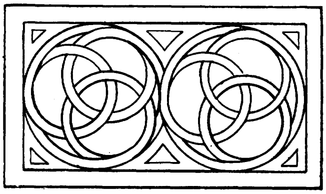
45



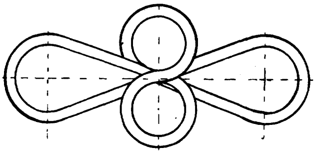
46



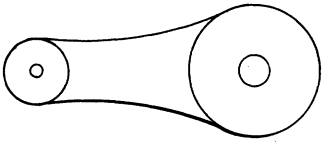
47



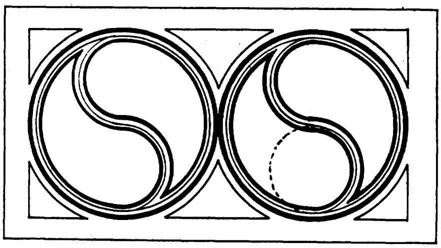
48



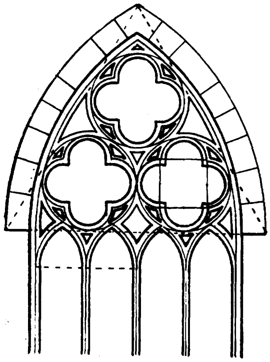
49



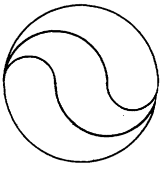
50



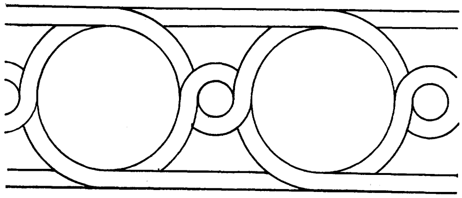
51



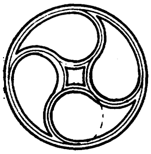
52



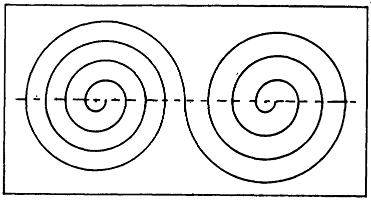
53



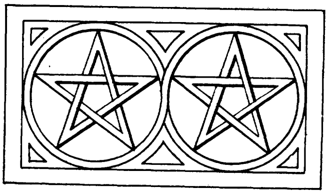
54



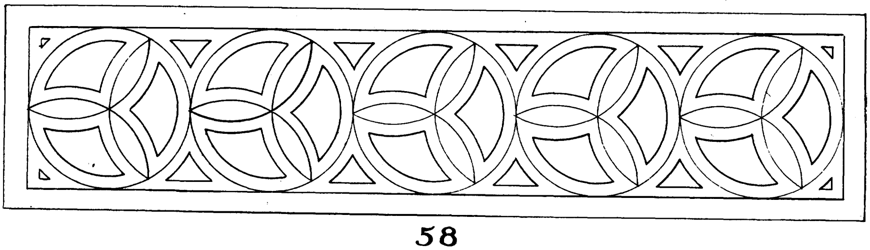
55



56



57



58

3. Drainage.

4. Geological structure. The formations and the origin of their materials. Mineral wealth stored in these formations.

5. Settlement and development. (a) Migration into and through this belt. (b) Location of towns and villages. (c) Occupation of people to-day in the belt.

XIV. The Ozark Mountains. These will be treated in the same general manner as the Appalachians, or as the Alleghany plateaus.

XV. The prairies of the north central states.

1. Location and extent.

2. Geological formations underlying the region. (a) Origin of the material and nature of deposition. (b) Mineral wealth in these deposits. (c) The loose mantle of glacial drift. Its distribution, topography, topographic relations, constitution, structure, and origin.

3. The glaciers which brought the drift. (a) Formation and movement of. (b) Work of erosion, transportation, and deposition. (c) Erosion by glaciers. Influence on hills, on valleys, on rock surfaces. (d) Transportation by glaciers. How does a glacier get material? Where does it carry material? (e) Deposition by glaciers. Causes for deposition. Nature of deposition. (f) Depositional forms and how to recognize them in the field. The terminal moraine, ground moraines, outwash plains, kames, eskars, valley trains, and drumlins.

4. The glacial period. (a) The different epochs — how to prove them in the field. (b) Theories for explaining the ice age or glacial period.

5. Evidences of glacial periods in other countries and in other geological ages.

6. Settlement and development of the regions glaciated.

**Art Expression:** 1. Modeling in sand and chalk the areas under consideration.

2. Painting in water-colors typical scenes chosen from the regions studied.

**References:** Same as given in January number, together with physical, geological, and topographic maps.

**Latin, Eleventh Grade:** (ALLEN W. GOULD.) The students will continue the reading of Cicero's orations against Catiline, probably taking up the third and fourth this month in the way described in the January COURSE OF STUDY (p. 490), and with the references already given in the COURSE OF STUDY for October (p. 177), November (p. 225), and December (p. 317). We shall try to help the students to see that these orations really give us a glimpse of the Roman government in actual operation, so that they can understand how necessary it was for the executive to have public opinion to back him, both in the Senate and among the populace, — unless he would rule by force alone, — and how difficult it was thus to educate public opinion as the Roman Empire grew larger and its citizenship less homogeneous.

In this way the student will see why Cicero was banished, because he had not been able to carry public opinion with him, and why Cæsar prevailed, because he gave up the attempt to have the people educate themselves. Then the pupils will be ready to ask themselves which of these two forms of governments is absolutely indispensable, if men are to rule themselves; and which of them was possible in Cæsar's time.

**Chemistry:** (ALICE P. NORTON.) In order to make the work more tangible, and the substances investigated more real, considerable time has been taken during the last month in discussing the relation of the different gases of the atmosphere to the life of the plant. One exercise was spent, under the direction of the biology teacher, in the study of the structure of the leaf, with the aid of the microscope. The function of the plant as a purifier of the air has been emphasized, and attention called to the wonderful economy of nature, by which the waste products of animal life are utilized in the vegetable world, and prepared for the further use of man.

In connection with the study of the composition of the air, the test for carbon dioxide has been made in the rooms of the school building. The following simple method, which gives fair results, especially when the air is bad, was employed for this:

Procure bottles of the given sizes: 16-ounce, 10-ounce, 8-ounce, 6-ounce, and 4-ounce. Using a common hand syringe, pump into each the air to be tested till the bottles are filled. Add to each one-half ounce of lime-water (one tablespoonful), cork, and shake thoroughly. After five minutes examine, comparing carefully the turpidity of the lime-water in the different bottles. In sixteen ounces of air, of ordinary purity (four parts of $CO_2$ in 10,000), there will be enough $CO_2$ to render the lime-water milky. It will not become milky in the 10-ounce bottle unless there are 6 parts of $CO_2$ in 10,000. The following table, from Tracy, shows the amounts indicated:

| SIZE OF BOTTLE. | AMOUNT OF LIME-WATER. | PARTS IN 10,000. | |
|---|---|---|---|
| 16-ounce. | ½ ounce. | A little less than | 4 |
| 10-ounce. | ½ ounce. | A little more than | 6 |
| 8-ounce. | ½ ounce. | About | 8 |
| 6-ounce. | ½ ounce. | A little more than | 10 |
| 4-ounce. | ½ ounce. | A little more than | 15 |

It is necessary of course to warn the pupil that the serious contamination of the air is not from the carbon dioxide, but that it is used as a convenient measure of the impurity.

Experiments have from time to time been assigned to individual pupils, who, after performing the work, have reported the results to the class as a whole. This has given practice in making clear, definite, intelligible statements, and has cultivated self-reliance. The subject of combustion was studied in this way, with the additional advantage that the class have been able to proceed more rapidly than they otherwise would.

In the January number it was stated that the best opportunity would be sought for the introduction of the conceptions of acid, base, salt. The question as to where the hydrogen came from, when it was prepared from sulphuric acid and zinc, led to the repetition of the experiment, using hydrochloric instead of sulphuric acid, and then to an examination of the symbols of the acids on the reagent bottles, with a consequent discussion of the meaning of acid.

After sodium was discovered in the ash of the leaf, the following experiment was performed by the teacher, and sodium hydrate was discussed as a typical base:

Make a small cylinder of wire gauze, twist fine wire about it, and close one end firmly. In it place a piece of metallic sodium as large as a pea, and close the open end as before. Attach the wire gauze cage firmly to the end of a piece of stout iron wire, and thrust it quickly into a water pan so that it will come directly under the mouth of a small bottle of not over 100 c. c. capacity, which has been previously filled with water and is held inverted in the pan. With a lighted match test the gas collected.

Some of the more rapid workers in the class will perform the following experiment to illustrate the formation of a salt:

Record carefully the readings of two burettes, containing respectively sodium hydrate solution and hydrochloric acid. Run out 20 c. c. of the hydrate into an evaporator. Add three drops of litmus solution. From the other burette add acid until the litmus changes to pink. Add from each burette until a point is reached where one drop from either will turn the solution blue or pink. The solution must finally be left pink. Again record the burette readings. Calculate how much hydrochloric acid is required to neutralize 1 c. c. of sodium hydrate.

Now take 5 c. c. of the hydrate. Add three drops of the litmus, as before. Calculate the amount of acid necessary to neutralize this amount and run in the calculated amount from the acid burette. This will test the accuracy of your former work.

To 25 c. c. of sodium hydrate in an evaporator add the amount of acid necessary to neutralize it completely and evaporate to dryness. Taste the residue.

Because of the introduction of the experiments here given, most of the work outlined for January will be done in February. If more time remains, it will be used in further discussion of these same subjects rather than in the introduction of new ones.

Some of the questions which will be used in written work are as follows:

1. On a certain railroad a tunnel lined with wood took fire from a spark from the locomotive. It was impossible to reach the flames with a hose. The authorities ordered the ends of the tunnel to be bricked up. Discuss whether this method should have been effective.

2. Given a bottle full of colorless gas. Upon testing it with a lighted wooden splinter the gas was found to support combustion. Lime-water was now added and turned milky. What was the original gas?

4. Why does blowing a flame sometimes put it out and sometimes make it burn more brightly?

4. Why does carbon dioxide often collect at the bottom of old wells, while in an ordinary room it is found distributed, or near the top? Give all the reasons.

**Mathematics, 11th and 12th Grades:** (GEORGE W. MYERS.) I. Applied Trigonometry. Plane trigonometry will be reviewed during February through a study of the stresses and strains in roof trusses, girders, cranes, and derricks.

The following topics will receive special attention:

1. Various forms of the simple crane (Figs. 1 to 3).
2. The derrick (Fig. 4).
3. Braces and tie-rods (Fig. 5).
4. The king-post truss (Fig. 6).
5. The inverted king-post truss (Fig. 7).
6. The queen-post truss (Fig. 8).
7. The inverted queen-post truss (Fig. 9).
8. The Burr truss (Fig. 10).
9. The Pratt truss (Fig. 11).
10. The Howe truss (Fig. 12).
11. The Warren girder (Fig. 13).

II. Field-work in plane surveying will be taken up as soon as the weather permits and

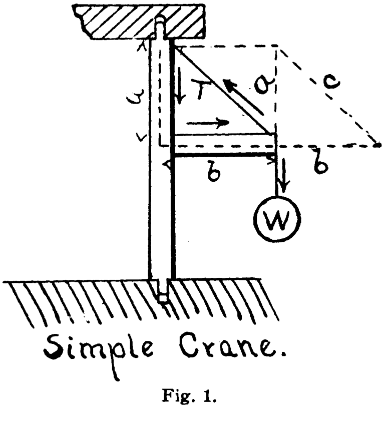


Fig. 1.

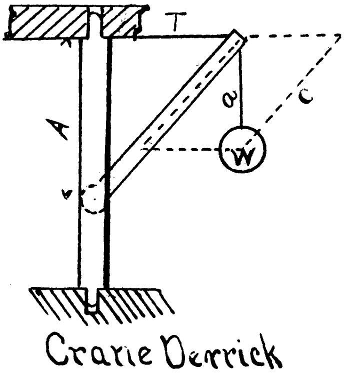


Fig. 2.

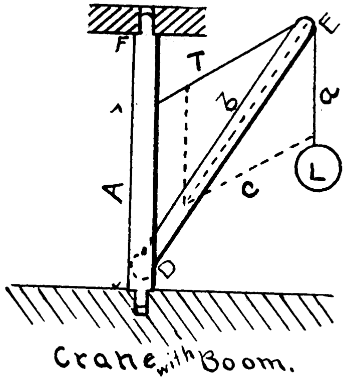


Fig. 3.

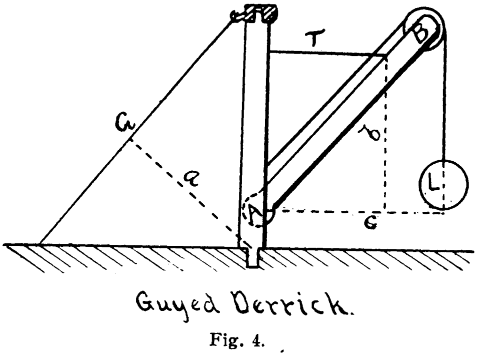


Fig. 4.

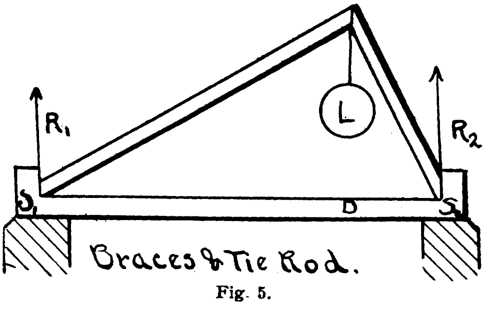


Fig. 5.

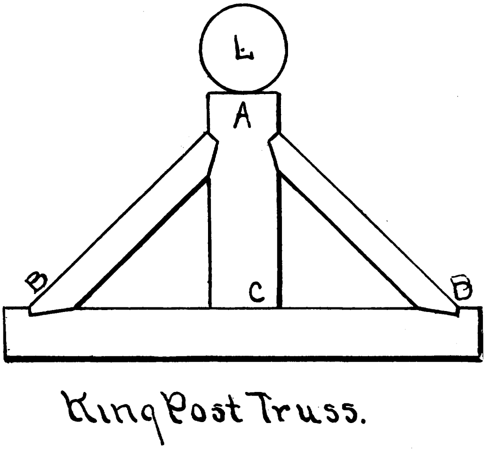


Fig. 6.

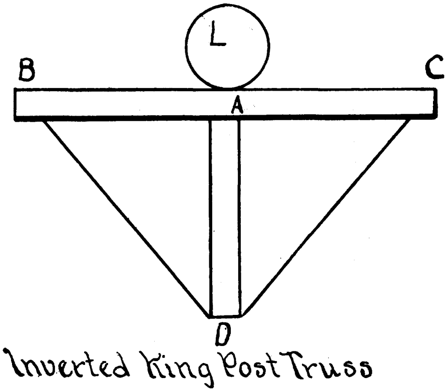


Fig. 7.

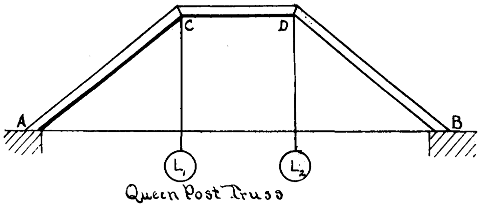


Fig. 8.

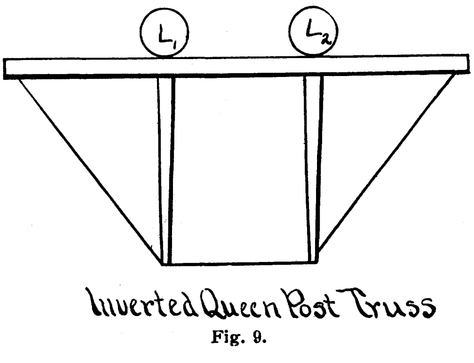


Fig. 9.

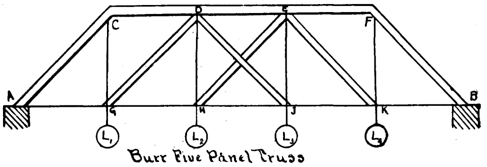


Fig. 10.

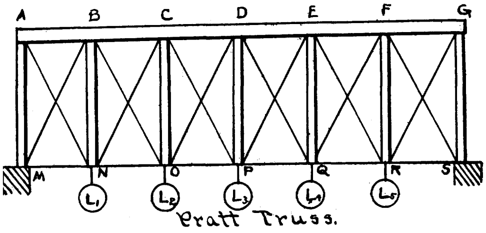


Fig. 11.

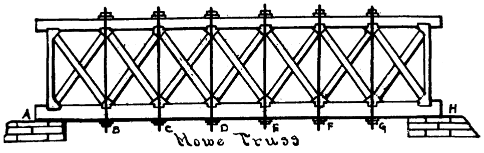


Fig. 12.

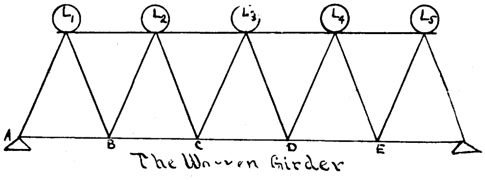


Fig. 13.

the subject of spherical trigonometry will be introduced through an examination into the instruments and methods used in our coast and geodetic surveys for running boundaries, mapping rivers, coast-lines, etc., where the curvature of the earth must be considered and allowed for.

III. The class will also begin plotting the graphs of the trigonometric functions. The equations to be plotted will be:

1. $y=\sin x$. 2. $y=\cos x$. 3. $y=\tan x$. 4. $y=\cot x$. 5. $y=\sec x$. 6. $y=\csc x$. 7. $y=\text{vers } x$. 8. $y=\text{covers } x$.

## Twelfth Grade

**History:** (EMILY J. RICE.)

SUBJECT—The Critical Period of our History.

This is the period that shows to the best advantage the value of the union of the separate States into one strong nation.

We shall begin with a discussion of the possible methods of political organization and review the history of federal leagues in the past, and also the history of representative government in England and in the American colonies. This will show, by comparison, the nature of the English principle of government and the struggle between nationalism and particularism in a federal system. By considering the condition of the States under the Articles of Confederation, the pupils may be led to see the necessity for union, and may discover what each State must yield in order to make a union possible. It may be well to organize the class as the Federal Convention, with the pupils as representatives from the States. In this way each pupil will try to contribute the arguments that were made in some one of the different sections of the country for and against the Constitution, and in order to present these arguments he will find it necessary to consult various sources of information. He will need to understand the conditions of labor and trade in his particular section, the size of his State compared with that of other States, and the extent of the entire country with its relation to other countries. It will be necessary to know the feeling of the sections in regard to each other, and consequently to consider the modes of travel of the time and difficulties of communication. The recent troubles that had been caused by laws in regard to commerce with foreign nations, different trade laws between States, different kinds of money, and unsettled boundaries of States, are important because they taught the people the weakness of the general government and the consequent peril of the country.

After having studied the formation of our national government, the students may consider how they are being governed in the schoolroom, how much of their discipline is imposed upon them by some central authority, and how much of it is in their own hands. Possibly their interest in the analysis of this problem will aid them in managing their own schoolroom affairs. If they undertake to do this, some form of government must be selected. Constant comparisons may then be made between the forms selected by the pupils and those established in our local and national governments. A study of the Constitution of the United States will follow.

The study of United States history will be used throughout the year, as far as possible, to help the children in the solution of problems arising in their own actual experience. Important current events should be considered, especially those which refer to the industrial and political affairs of our own city and country.

**Books of Reference:** Fiske, *Critical Period of Our History;* McMaster, *History of the United States*, v. 1; Schouler, *History of the United States*, v. 1; Frothingham, *Rise of the Republic; The Federalist;* Hart, *Formation of the Union; Statesmen Series: Hamilton, Madison, Washington; American History Leaflets; Old South Leaflets;* Hart, *Source Book* and *American History Told by Contemporaries.*

**German:** (DR. SIEGFRIED BENIGNUS.) The recitations in literature of the advanced High School pupils have shown a deficient knowledge of versification. Only he who is familiar with the poetic form is able fully to understand the beauty of poetry, and to follow the innermost emotions of the poet. German genius has found high expression through rich and varied poetry clothed in the manifold native meters as well as in those of the cognate English, and in a characteristically flexible adaptation to all possible external forms in the simplest and most intricate structure of versification of the other civilized nations, such as the Greeks and Romans, the French, Italians, Spaniards, and even the non-Europeans. The art of German versification gives excellent opportunity for observing the interrelations of German with English literature, and with the literatures of all other nations. To insert detailed outlines in the COURSE OF STUDY would require too much space. They will, therefore, be printed separately.

In the study of literature since October, the work on Schiller has been completed. So far as possible until the end of the school year, the pupils will be familiarized with the prominent writers of poetry and fiction as well as of scientific prose from the time of Schiller to the present day. The phases of the study to be pursued by the class are these:

I. Classic and Romantic School (1748–1848.)
(1) Independent contemporaries of the Classics.
(2) The Romantic School.
(3) The Earlier Romanticists.
(4) The poets of the Napoleonic War Period.
(5) The Suabian Circle of poets.
(6) Other Lyric poets allied with the Romanticists.
(7) The Drama since Schiller's death up to the thirties.
(8) The forerunners of Realistic poetry.
(9) The Newer Germany; political poets.
(10) The Later Romanticists of the forties.
(11) The scientific prose of the Romantic epoch.
II. Modern poetry; transition to and struggle for new ideals (since 1848).
(1) Different suppositions and principles in literature.
(2) Transitions from classic-romantic to modern poetry.
(3) The poetic Realism; modern poets.
(4) German literature since 1870.
(5) The scientific prose since 1848.

February will be taken up with the contemporaries of Göthe and Schiller: Johann Peter Hebel, Jean Paul, Friedrich Hölderlin, Friedrich von Matthison, Johann Gottfried Seume, August Wilhelm Iffland, August Kotzebue, Immanuel Kant, Wilhelm and Alexander von Humboldt, Georg Forster, Karl Ritter, Johannes von Müller, Christian Gottlob Heyne, Friedrich August Wolf; and the views of the romanticists and their contributions to the spiritual life in Germany. The reading matter will be taken from these writers.

To correlate with the special subject of the High School during February, the War of Independence will be studied, illustrating (1) cause, (2) important generals and battles, (3) attitude of the European powers, (4) results. The pupils will report on the matter in writing and verbally, thus furnishing opportunity for correcting mistakes in grammar.

For memorizing, the poem "Möven," in free rhythm, has been selected.

### Möven.

Schwebend, kreiſend eilt ihr Möven
Stetig hinterm Schiffe her.
Weit vom Lande es begleitend,
Fern vom Lande es begrüßend,
Seid ihr ſtets willkomm'ne Gäſte,
Die der Wand'rer freudig ſchauet,
Weiße Möven, Meerbegleiter!

Schwebend, kreiſend eilt ihr Möven
Stetig hinterm Schiffe her.
Morgens, wenn die Sonne ſteiget,
Seid ihr da. Wie Lichtgeſandte
Schwebt ihr in der Ätherhöhe.
Wiederum im Abendleuchten
Eilt ihr, wo des Horizontes
Strich die dunklen Waſſer ſcheidet
Von der Flammenglut des Himmels,
Segelt eilig hin und ſchwindet —
Dunkelſchatt'ge Abendvögel,
Leichtbeſchwingte Abendgeiſter,
Die der Ruh' entgegeneilen,
Ruh' auf felſ'gem Küſtenſtrand.

Weiße Möven, ſchöne Segler,
Seid ihr freundliche Gedanken,
Die die Lieben nach uns ſandten
In verkörperten Geſtalten?
Seid ihr freundliche Gedanken,
Welche uns entgegeneilen,
Schwingen breiten, Arme breiten
Aus dem Lande unſ'rer Zukunft,
Aus dem Lande unſ'rer Hoffnung,
Aus dem Land Amerika?

Wilhelm Benignus,
Aus Copyright „Meerlieder".

References for the study of Schiller begun in October: Schiller's life and works (only a few of the most important can be given here). Wychgram, **Schiller,** 1895 (numerous authentical illustrations); Deutſche Verlags-

**Anſtalt, Schillers Werke,** illustrated by the best German artists; J. Minor, **Schiller, ſein Leben und ſeine Werke,** 1890; Otto Lyon, **Schillers Leben und Werke,** 1890; Otto Brahm, **Schiller,** 1888; C. Hepp, **Schillers Leben nnd Dichten,** 1885; Heinrich Düntzer, **Schillers Lebeu,** 1881; August Spiess, **Schillers Leben und Dichtungen;** Emil Palleske, **Schillers Leben und Werke,** 1858, especially new edition 1891; Gustav Schwab, **Schillers Leben,** 1840; Karl Hoffmeister, **Schillers Leben, Geiſtesentwickelung und Werke im Zuſammenhang,** 1838—42; revised edition by Heinrich Viehoff, 1888; Karoline von Wolzogen, **Schillers Leben,** compiled from the recollection of the family, his own letters, and the communication of his friend Christian Gottfried Körner; Hermann Kurz, **Schillers Heimatjahre** (a novel containing poetry and truth); Moritz Zille, **Schillerhalle,** 1870, best thoughts from Schiller's works and letters, alphabetically arranged; Ludwig Rudolph and Karl Goldbeck, **Schillerlexikon,** 1869; H. Viehoff, **Schillers Gedichte erläutert und auf ihre Quellen zurückgeführt,** 6th edition, 1887; H. Düntzer, **Schillers Gedichte erläutert,** 3rd edition, 1888—91. A copious catalogue of the Schiller literature to present time gives M. Koch in vol. V of the second edition of **Gödekes Grundriß.** Carlyle, *Life of Schiller*, an examination of his works, 1825; E. L. Bulwer, *Life of Schiller* (introduction to the translation of Schiller's poems); Sime, *Life of Schiller;* English edition of Schiller's works (selection) by Morrison, Coleridge, Bulwer, Churchill and others (Philadelphia); Poems by Edgar Bowring, Bulwer, Merivale, Swanwick, Wireman (Philadelphia); selections by Turner and Morshead. and Vernon; *Song of the Bell*, by Arnold Forster (Bradford); **Wallenſtein,** by Coleridge, Lockhart; **Maria Stuart; Jungfrau von Orleans** and **Tell** by Pearson.

**Music:** (HELEN GOODRICH.) The High School is working upon three-part rounds, canons, and hymns, and will this month take up some more difficult part-songs. The basses have special drill once a week. The work of the class is directed chiefly toward improving the singing in morning exercises.

**High School and Ensemble Songs:** *Flag Song*, February COURSE OF STUDY; *Hail Columbia*, Modern Music Series, Second and Third Books; *Fatherland's Psalm*, Grieg, Seven Children's Songs (Augener & Co.); *The King of Love*, Songs of Life and Nature; *Little Rosebud*, Nursery Rhymes, Brahms (Augener & Co. Reprinted in Silver Song Series, No. 2, Silver, Burdett & Co.); *The Hardy Norseman*, Modern Music Series, Third Book; *Morning and Night*, Songs of Life and Nature.